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THE STATISTICAL WORK OF THE WAR TRADE BOARD.*

By ARTHUR E. SWANSON.

Statistical material is secured by the War Trade Board partly in the form of records needed chiefly in the administration of individual transactions, partly as a by-product of administration, and partly in the form of data collected for purposes of statistical control.

To illustrate the first kind, an exporter of coal must accompany his application for an export license with a supplemental information sheet giving a number of details which serve to guide the trade adviser in the Bureau of Exports in deciding whether that particular license should be granted. In this instance the data are secured to aid in the administration of individual transactions.

It would be possible to prepare from these supplemental information sheets, statistical reports of value as a by-product of administration. They would show the monthly and annual consumption of fuel by various industries in foreign countries; the amount of coal at various points of destination on stated dates; the number of tons of coal in transit at given periods and the amount of coal shipped by districts of origin by months or some other period.

The third kind is illustrated by the export declarations which are required, not primarily for the purpose of checking individual declarations against a license, although that is done, but chiefly in order to secure data for the compilation of reports to show the amounts and value of different commodities exported.

Only a portion of the material assembled by the various Bureaus of the War Trade Board accordingly is handled in a way which we normally think of as statistical. The remainder is handled as records, a study of which frequently proves helpful though no statistical compilation is made.

The character of the statistical material assembled by the

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War Trade Board can be best understood in the light of the functions of the War Trade Board, because the material is assembled either for the purpose of aiding in the execution of these functions or as by-products of them. It will be helpful accordingly to discuss briefly some of the more important of these functions.

The War Trade Board, which is a successor to the Exports Administrative Board established August 21, 1917, was created by executive order October 12, 1917. By this order the Board was vested with the power and authority to issue or refuse licenses for the importation and exportation of articles the trade in which was restricted by proclamations issued before or after the establishment of the Board, and to issue or refuse licenses to trade either directly or indirectly with the enemy. As a result, the Board, through the executive order and subsequent proclamations, has been given very wide controlling power over the foreign trade of the United States. Through this control it has sought (1) to reduce to a minimum the shipments of goods through neutral to enemy countries, (2) the elimination of any direct trade with the enemy, (3) the reduction to a minimum of trade with pro-enemy persons, or firms, in neutral countries, (4) the conservation of materials needed for war purposes by refusal to allow the exportation thereof, (5) the facilitation of the exportation of certain commodities required in neutral countries because of their direct or indirect aid in the war, (6) the facilitation of the exportation of certain commodities to allied countries, (7) the restriction of importation of commodities in order to conserve tonnage, (8) the control of the movement of vessels through bunker licensing.

The Board is organized for the performance of its functions into Bureaus as follows:

- Bureau of Exports
- Bureau of Imports
- Bureau of War Trade Intelligence
- Bureau of Transportation
- Bureau of Research and Statistics
- Bureau of Foreign Agents
- Bureau of Enemy Trade

Bureau of Branches and Customs
Bureau of Administration

The Bureau of Research and Statistics is a combination of the Bureau of Tabulation and Statistics and the Bureau of Research which functioned separately until very recently.

Briefly summarized, the Bureau of Exports receives the applications for export licenses, grants or refuses them, according to rulings of the War Trade Board and the findings of the Bureau of War Trade Intelligence.

The Bureau of Imports functions similarly for imports.

The Bureau of War Trade Intelligence is charged with securing information which will prevent trading with the enemy and issues its instructions to the Bureaus of Imports and Exports.

The Bureau of Transportation controls the movement of vessels bunkering at ports of the United States.

The Bureau of Research and Statistics undertakes economic and political investigations assigned to it by the Board and tabulates statistical material for the Board and for the various bureaus.

The Bureau of Foreign Agents is the home office for the agents and representatives of the War Trade Board in foreign countries.

The Bureau of Enemy Trade passes on the licenses to trade with the enemy.

The Bureau of Branches and Customs is the home office of the branch bureaus of the War Trade Board throughout the United States.

The Bureau of Administration is, as the name indicates, the administrative bureau of the Board.

Although this plan provides for the concentration of the statistical work in one department, considerable statistical work has had to be performed by the other Bureaus.

IMPORTS INTO THE UNITED STATES.

In order that the War Trade Board may be in a position to grant or to refuse the license, the importer is required to submit with his application for a license a statement containing specified information as follows:

Date
Applicant's reference number
Applicant
Consignee
Actual purchaser
Number and kind of packages
Net weight (in pounds)
Consignor
Country in which purchased
Country in which produced
Producer
Port of shipment
Port of entry

After this application has been granted or refused by the Bureau of Imports, the Bureau of Research and Statistics tabulates these data to show the amount in value and quantity licensed for import by ten-day and monthly periods and by countries of origin. It also tabulates in a similar manner the licenses refused.

It would be possible to tabulate likewise the imports for which licenses are granted or refused by port of shipment, port of entry and by country of production, but this has not been done due to the amount of time and labor involved.

The value of the tabulation of commodities licensed for import is significant in many instances, but is impaired by the fact that many licenses are not utilized but permitted to expire unused and that licenses are frequently cancelled by order of the War Trade Board for various reasons.

The particular value of the tabulations of commodities licensed for import has been the indication these tabulations have given as to the amounts of the various commodities which importers plan to bring into the country. The tabulations have not given exact information of this kind because of the large number of cancellations and revocations.

Upon receipt of his license the importer submits it to the collector of customs for entry as to date of entries, number of vessels or cars, quantity and value. With it he submits a consumption entry in duplicate with information as to

Port
Entry filed
Consignee
Date of arrival
From
Marks and numbers
Merchandise: packages and description
Quantity
Value in foreign money
Value in United States money
War Trade Board commodity code number
War Trade Board license number
Invoice number
Date
Place

One copy of the consumption entry is forwarded to the Bureau of Research and Statistics for tabulation.

These entries are in the form of consumption entries, appraisement and informal entries, warehouse and re-warehouse entries, warehouse and transportation entries, in-transit entries, and carriers customs manifests. The data on these entries are tabulated to show the imports of commodities, in quantity and value, by country of origin.

EXPORTS FROM THE UNITED STATES.

To obtain an export license the consignor must submit an application blank to the Bureau of Exports, or to a collector of customs, in case of a small shipment of non-conserved commodity not over one hundred dollars in value, when sold to a consignee not on the enemy trading list and not in enemy or pro-enemy countries. The data given include

Date
Applicant's reference number
Consignor
Approximate number and kind of packages
Commodity
Weight
Value of each item
Consignee abroad
Ultimate destination

If the application is granted, the exporter is given a license containing the information as follows:

- Date
- Expiration date
- Applicant's number
- License number
- Consignor
- Approximate number and kind of packages
- Commodity
- Quantity
- W. T. B. code number
- Value
- Consignee
- At
- Ultimate destination

The data on the export licenses are tabulated to show the commodities, in quantity and value, licensed for exportation by countries of destination. The tabulations of the export licenses indicate in a broad way the amount of goods the exporters are planning to ship out of the country but, as in the case of import licenses, such tabulations do not give accurate information because of cancellations, expiration of the licenses and revocations. License refusals are also received by the Bureau of Research and Statistics, coded, recorded, filed. When the goods are shipped, the Bureau of Research and Statistics receives a copy of the shippers' export declaration containing the following information:

- Consignor
- Place of original shipment
- Carrier or vessel
- Port of exportation
- Ultimate destination
- W. T. B. export license number
- Date of expiration
- Marks and numbers
- Number and kind of packages
- Commodity
- W. T. B. code number
- Quantity
- Value

These data are tabulated to show the actual exports, in quantity and value, by country of destination.

One object in tabulating the actual imports and exports, as well as the licenses for imports and exports, was to check the actual imports and exports against those licensed so as to ascertain whether the actual imports or exports exceed the amounts licensed. Though this check has been valuable it has not been exact because of the large number of cancellations, revocations and expired, unused licenses.

Another purpose in arranging the tabulating procedure was to so file the Hollerith cards used for a license and for an actual export or import that they could be readily compared and violations detected. This procedure, although provided for, has not been developed fully and the checking for each import or export shipment has been accomplished in the main by comparing the original license with the import entry or the export declaration.

The tabulation of actual imports and exports is in a measure a duplication of the tabulation by the Treasury Department and the Department of Commerce, but this duplication was unavoidable without a substantial modification of the commerce classification which it was inexpedient to make except upon considerable study.

It was essential that a classification be devised which suited the purposes of the War Trade Board. It was also necessary to have the imports and exports given in weight in each instance as well as in value.

As an illustration of the reports that are prepared, the data relating to export licenses are tabulated as follows:

A general tabulation of export licenses granted is prepared by ten-day periods, for forty-three (43) country groups. This tabulation is for quantities only. The commodities in the classification have been selected because significant amounts of them are ordinarily exported by the United States. Each month a summarized tabulation is prepared for ten groupings of commodities totaled for each of the forty-three country groups.

In addition to this general report on export licenses granted the Bureau prepares at regular intervals (daily, weekly, or

monthly) certain reports which apply to a specific country, or to a specific commodity or group of commodities. The following are examples of such reports:

1. Daily tabulation of licenses granted for export of food stuffs.

2. Daily tabulation in detail of every item of information contained in the export licenses for all licenses granted to Mexico.

3. Monthly tabulation of licenses for shipments having a value of less than one hundred dollars.

4. Monthly tabulation of licenses granted to the Northern Neutrals. Likewise, monthly tabulation of licenses granted to the United Kingdom, Japan, Italy, France, Dutch East Indies, Belgium and Argentine.

5. Ten-day tabulation of licenses granted for export of sugar. Similar ten-day report on rubber and manufactures thereof, pig iron, oil, flour substitutes, etc.

6. Monthly licenses granted and refused to Greece giving quantity, value and number of licenses.

Most of the above reports are for quantities, values, and number of licenses.

In addition to the above regular reports, both general and specific, the Bureau prepares a large number of special reports, when requested by officers of the War Trade Board and other Governmental agencies.

The import licenses granted are tabulated by calendar months for the same forty-three (43) country groups and for the same commodities for which the export licenses are tabulated. As the commodity classification used for the tabulation of import licenses was prepared primarily for the classification of export licenses, it contains many commodities which we do not import, and on the other hand does not contain a number of commodities of which we import a substantial amount.

In addition to the general tabulation the monthly tabulations are prepared for specific countries and commodities, as in the case of exports.

Similarly, for actual imports and exports, general and specific reports are prepared regularly daily, by ten-day periods, or monthly, and special reports are prepared as requested.

TRANSPORTATION.

Data pertaining to vessels bunkering in Ports of the United States are received by the Bureau of Transportation in regard to

1. General characteristics and equipment of vessels
 - a. Type of vessel
 - b. Tonnage
 - Gross
 - Net
 - Deadweight
 - c. Number of officers
 - d. Number of crew
 - e. Type of engines
 - f. Indicated horsepower
 - g. Average daily consumption of fuel
 - at sea
 - in port
 - h. Average speed
2. Registry, ownership and control of vessels
 - a. Flag
 - b. Owner
 - Nationality
 - Address
 - c. Charterer
 - Nationality
 - Address
 - d. Charter party
 - Date
 - If time charter
 - date of expiration
 - trading limit
3. Bunkers for vessels
 - a. Fuel taken aboard
 - (1) At American ports
 - (2) At foreign ports
 - b. Stores and supplies taken aboard at American ports
 - Food
 - Deck and cabin supplies
 - Engine supplies

The above records are complete only for a brief period as bunker control did not commence until February, 1918.

Specifically, the information under (1) is generally complete except for statement of deadweight tonnage of vessels. Under (2) the charter facts are not always given, this being largely a question whether the vessel is under control of the Chartering Committee of the United States Shipping Board. Under (3) the record of fuel taken at American ports is complete. The "Master's Report on Outward Voyage," which contains the record of fuel taken at foreign ports, has been required for the last few months only, and in some cases has not been submitted. Likewise the records of stores and supplies taken aboard at American ports only now begin to come in a reasonably complete form.

The following are the documents known as bunker forms from which these data are secured:

Application for license, bunker fuel, port, sea and ships stores and supplies.

License for bunkers and stores.

Master's report on outward voyage.

Agreement to comply with bunker rules.

Agreement that vessel will return to United States for discharge of entire return cargo.

Agreement to return.

Agreement of master of vessel regarding discharge or transfer of bunkers and stores and filing of bunkers and stores licenses.

Affidavit and agreement of master of vessels governing disposition of cargo.

Preliminary license for bunkers and stores. (Not used.)

Food store list.

Deck and cabin store list.

Engine store list.

Slop chest list.

Supplementary stores list.

Food consumption report.

Stores for vessels lying in the stream.

Application for sugar purchase.

Individual allied seaman's application for food supplies for home consumption and personal effects.

Summary of allied seaman's application for food supplies for home consumption and personal effects.

Reports of various kinds have been prepared through the tabulation of these data but in the main the records have been used individually and not statistically.

INFORMATION RELATING TO THE ECONOMIC CONDITIONS AND
TRADE OF THE UNITED STATES AND FOREIGN COUNTRIES.

The data bearing on the trade and economic conditions of the United States and foreign countries have been obtained chiefly from the official reports of the countries in question. The Bureau of Research and Statistics, in addition to a large number of official publications which it has been able to secure, has utilized very freely the publications in the Congressional Library, the Library of the Department of Commerce and the Library of the State Department. The official sources have been supplemented by a very large number of reports in the form of cables and written communications from embassies and consulates, War Trade Board representatives and agents, Military Intelligence Agents, Naval Intelligence Agents, the Shipping Board Mission, and attachés of the Department of Commerce. A large number of inquiries in particular have been addressed to representatives and agents of the War Trade Board.

Early in the year a special questionnaire was submitted by the State Department to all consuls. This questionnaire was particularly designed to secure information for the "Inquiry" but copies of all the reports were made available to the Bureau of Research and Statistics. A special questionnaire was prepared jointly by the State Department and the Bureau of Research and Statistics which was to serve as a basis of a monthly report by each consul. This questionnaire with instructions was sent to all the consuls, and reports are soon due. It is very important that these monthly reports be continued. If they are, and if the consular offices are so equipped that they can prepare reports based on these questionnaires, we shall be receiving in this country excellent data on the trade and economic conditions of foreign countries.

The following list of reports prepared indicates the nature and the extent of the investigations made:

1. Reports showing the quantity of essential imports into neutral and allied countries from the United States prepared in order to enable the War Trade Board to establish export priorities and in order to reduce the exports to a minimum, thereby releasing tonnage for war use. These studies have been most comprehensive and have been designed to show the quantities of such imports not only in totals but classified according to the amounts required by the importing country in order to assist it in contributing to the successful prosecution of the war and to show the amounts required by the country for its own economic life.

2. Exhaustive studies of the economic position of certain neutral countries particularly those contiguous to enemy countries in anticipation of agreements between the United States and those countries for the purpose of controlling, if not eliminating, their trade with the enemy.

These researches have been made to ascertain the essential requirements of these countries for home consumption, their ability to produce goods to meet these requirements, their dependence on enemy countries for essential requirements, our ability, or that of our Allies, to reduce or eliminate this dependency and, if such dependency could not be removed, the economic compensations which these countries would be required to make to the enemy countries.

To illustrate, it has been necessary to determine the exact amount of the various foods produced in a number of countries and to determine, on the basis of accepted rations, the exact amount consumed so as to ascertain the amounts of food of the various kinds that had to be imported and the time of the year when these imports must take place.

3. Investigations of the economic position of certain countries designed to show in what capacity and to what extent those countries, even when neutral, could contribute to the successful prosecution of the war through a more intensive utilization of their resources.

4. Commodity studies to show the world requirements for specific commodities for a year in advance and comparisons of these estimated amounts with the estimates of production.

5. The effect of the war on the foreign trade of allied nations, particularly the United Kingdom, in order to show to what extent the foreign trade was reduced or modified by the war. So many varied opinions prevailed regarding the effect of the war on the foreign trade of the United Kingdom,—many persons intimating that the United Kingdom was not allowing its foreign trade to be greatly handicapped by the war,—that it was desirable to have a careful study made of the actual situation.

6. Reports on the accumulated shortages and surpluses of key commodities in specified countries.

7. Investigations to determine whether the demand for certain commodities for war uses in relation to the supply was such as to warrant the placing of that commodity on the conservation list of the War Trade Board.

8. A study of the net balance of trade, shipping and insurance accounts between the United States and thirteen foreign countries. The purpose of this study was to assist the Treasury Department in determining where and to what extent credits should be extended to foreign countries.

9. Investigations to show the distribution of the imports of specific commodities amongst importers and manufacturers for a selected year in order to determine the relative amounts of the restricted imports of these commodities which should be allocated to each importer and manufacturer.

10. Similar investigations were made in the case of commodities the export of which was restricted, except that in this case the studies were made of the amounts exported by the consignors in this country, or amounts imported by the consignees in such countries where the restriction applied.

11. Studies conducted jointly with the Food Administration, the Shipping Board, the War Industries Board to show by countries the net imports or net exports of specified commodities, thereby indicating the position of each country in relation to that commodity.

SPECIAL INQUIRIES.

From time to time the Bureaus of Imports and of Exports in particular and sometimes other Bureaus have sent out special questionnaires, either directly or through trade as-

sociations. A large number of questionnaires have been sent out in this manner. The information gathered in this way has been tabulated sometimes by the trade associations, sometimes by the Bureaus securing the questionnaires and sometimes by the Bureau of Research and Statistics.

The object in securing the information sought by these questionnaires has varied. In a large number of instances the purpose has been to aid in the allocation of the commodities imported amongst the various importers in accordance with some equitable plan or to allocate the amounts exported among consignors or consignees.

In a large number of other instances, the object in securing this information has been to ascertain the use to which the commodity will be put in the country of destination and thereby help the Bureau of Exports to determine whether the commodities should be allowed to leave the country.